

REMARKS/ARGUMENTS

In response to the Office Action mailed March 25, 2004, the applicants respectfully request reconsideration. In the Office Action, claims 1-15 were rejected. By this amendment, the Specification has been amended. Accordingly, claims 1-15 are pending in this application.

Claim Rejection Under 35 U.S.C. §112

Claims 2, 7 and 12 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enabling requirement. The examiner states that the specification does not teach how, in a single address, one field can be shifted without destroying some of the data shifted over. This rejection is respectfully traversed.

Claim 2 recites, among other features, that the absolute address is generated by shifting the digits comprising the segment identifier to higher-order digit positions thereby to provide a shifted segment identifier, and adding the offset to the shifted segment identifier. The components of the segmented address are described on page 13, lines 14-22 and the shifting operation is described on page 15, line 23-page 16, line 5. Accordingly, applicants assert that there is support for claim 2 in the specification and that the rejection under 35 U.S.C. §112, first paragraph be withdrawn.

Support for claims 7 and 12, which include language similar to the language in claim 2 can also be found on the pages noted above. Therefore applicants assert that there is also support for claims 7 and 12 in the specification and that the rejection under 35 U.S.C. §112, first paragraph, be withdrawn.

Claim Rejection Under 35 U.S.C. §102

Claims 1, 3-6, 8-11 and 13-15 were rejected under 35 U.S.C. §102(e) as being anticipated by DeSota et al. The examiner states that DeSota teaches an address translation module that provides an address in a request as an absolute address when the request is for one section of memory and generates an absolute address from the address provided in the request including a segment identifier and offset when the request is for

another section. This rejection is respectfully traversed, as DeSota does not teach or suggest the invention recited in claims 1, 3-6, 8-11 and 13-15.

DeSota teaches a multiprocessor computer system with memory map translation in which shared memory distributed among multiple nodes appear to the system like a single-node environment. In order for the system to appear like a single-node environment, a memory map, such as shown in Fig. 6, is generated which allows processors on any node to access system resources on other nodes, even for overlapping addresses (col. 6, lines 54-57). In the case of overlapping addresses, the memory map assigns unique representative addresses to each overlapping address (col. 6, lines 16-30). The representative address from the single-node environment is translated to an actual address by determining a node that the address corresponds to and changing the representative address to an actual address for that node (col. 6, lines 44-49). Each representative address has a lookup table entry associated with it so that a node can be associated with a representative address (col. 9, lines 1-4). Each representative address has a base portion and an index portion. When the representative address is to be translated to the actual address (after determining which node the representative address identifies using the lookup table), the base portion is compared to predetermined values to determine to what space the address corresponds. The comparison of the base portion is used to determine the actual address space on the node corresponding to the representative address (col. 9, lines 23-36). Based on the comparison of the base portion, the actual memory address on the node replaces the original base portion included in the representative address (col. 9, lines 37-39). The index portion has no effect on the translation of the address.

Therefore, the address translation taught by DeSota involves a lookup table which identifies the node with which a representative address is associated. When the particular node is identified, the base portion of the representative address is compared to predetermined values to determine the actual address space on the node. The index portion does not affect or influence the translation.

Independent claim 1 recites, among other features, an address translation module configured to, if the access request requests an access operation in connection with another of the sections, generate an absolute address from the address provided in the

access request, the address in the access request including a segment identifier and an offset, the address translation module being configured to process the segment identifier and offset to generate an absolute address identifying at least one storage location in the other of the sections.

As set forth above, DeSota's address translation operation only involves the base portion of the representative address. The index is not used in any way to determine the actual address. While the examiner states in the rejection that the base and index are used to find the actual address, this is simply not the case. None of the portions of the patent cited by the examiner support this assertion, and the patent as a whole does not support this assertion.

Clearly then, DeSota does not teach or suggest generating an absolute address from the address provided in the access request, the address in the access request including a segment identifier and an offset, wherein the address translation module is configured to process the segment identifier and the offset.

Accordingly, since DeSota does not teach or suggest every element recited in independent claim 1, independent claim 1 is allowable over DeSota and the rejection under 25 U.S.C. §102(e) should be withdrawn.

Claims 2-5 depend from independent claim 1 and are allowable for at least the same reasons as independent claim 1.

Independent claim 6 recites a memory management method including, among other steps, if the access request requests an access operation in connection with another of said sections, generating an absolute address from the address provided in the access request, the address in the access request including a segment identifier and an offset, the address translation module being configured to process the segment identifier and offset to generate an absolute address identifying at least one storage location in the other of the sections.

Based on the argument set forth above regarding independent claim 1, applicant asserts that, since DeSota does not teach or suggest every element recited in independent claim 6, independent claim 6 is allowable over DeSota and the rejection under 25 U.S.C. §102(e) should be withdrawn.

Claims 7-11 depend from independent claim 6 and are allowable for at least the same reasons as independent claim 6.

Independent claim 11 recites a computer program product including, among other features, an address translation module configured to, if the access request requests an access operation in connection with another of the sections, generate an absolute address from the address provided in the access request, the address in the access request including a segment identifier and an offset, the address translation module being configured to process the segment identifier and offset to generate an absolute address identifying at least one storage location in the other of the sections.

Based on the argument set forth above regarding independent claim 1, applicant asserts that, since DeSota does not teach or suggest every element recited in independent claim 11, independent claim 11 is allowable over DeSota and the rejection under 25 U.S.C. §102(e) should be withdrawn.

Claims 12-15 depend from independent claim 11 and are allowable for at least the same reasons as independent claim 11.

Based on the foregoing amendments and remarks, the applicants assert that pending claims 1-15 are allowable over the prior art of record and respectfully requests that a timely Notice of Allowance be issued in this application.

In the event the Examiner deems personal contact desirable in the disposition of this case, the Examiner is invited to call the undersigned attorney at 508.293.7835.

Applicants submit herewith a Request for One Month Extension of Time under 37 C.F.R. §1.136(a). Please charge any additional fees occasioned by this submission to Deposit Account No. 05-0889.

7/16/04

Date

Respectfully submitted,

Scott A. Ouellette

Scott A. Ouellette, Esq.
Reg. No. 38,573
EMC Corporation
176 South Street
Hopkinton, MA 01748
Telephone: (508) 293-7835
Facsimile: (508) 497-6915